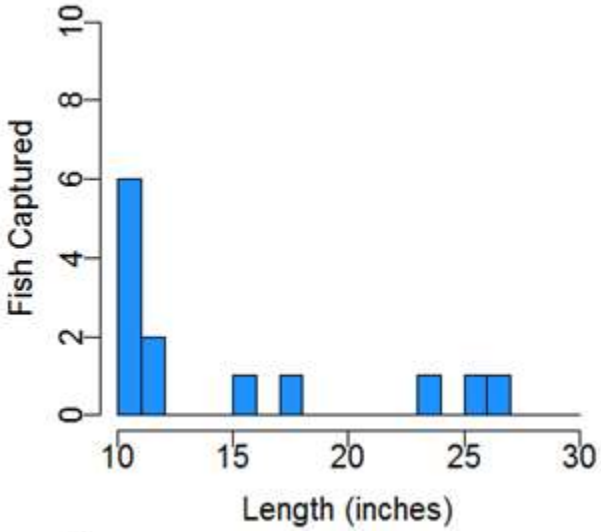
Spring Fisheries Survey Summary
Barker Lake, Sawyer County, 2016

The Hayward DNR Fisheries Management Team conducted a fyke netting survey on Barker Lake from April 4-6, 2016 to assess the adult walleye, northern pike, and black crappie populations. Five nets were set overnight for two nights which resulted in 9 total net-nights of effort (one net was compromised by weather). An electrofishing survey conducted on May 9, 2016 documented the status of smallmouth bass, juvenile walleye, and non-game species. The whole shoreline of the lake (4.6 miles) was shocked. Quality, preferred, and memorable sizes referenced in this summary are based on standard proportions of world record lengths developed for each species by the American Fisheries Society.

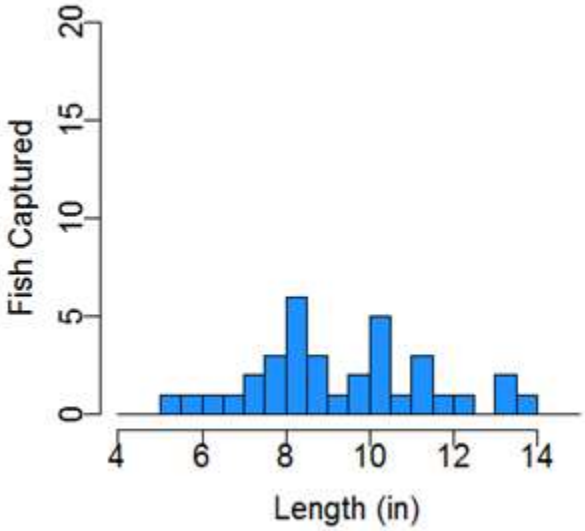
Walleye (Adult)

Captured 1.3 per net-night ≥ 10 inches	
Quality Size ≥ 15"	38%
Preferred Size ≥ 20"	23%



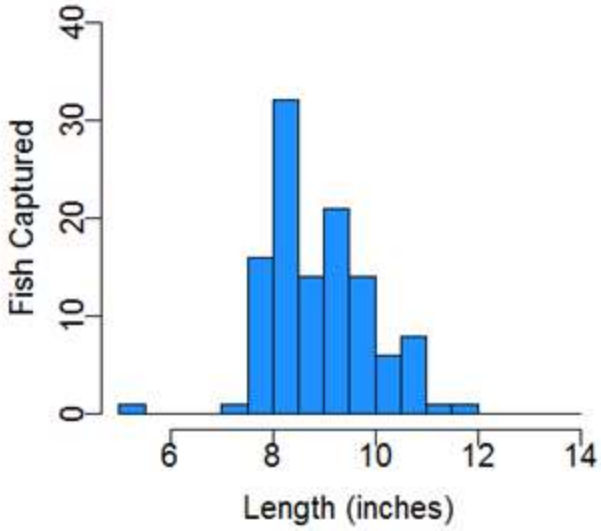
Walleye (Juvenile)

Captured 7.6 per mile ≤ 10 inches



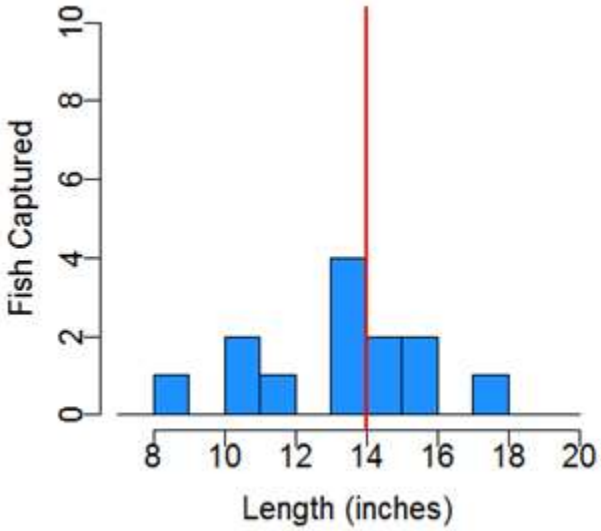
Black Crappie

Captured 12 per net-night ≥ 5 inches	
Quality Size ≥ 8"	84%
Preferred Size ≥ 10"	14%



Smallmouth bass

Captured 3 per mile ≥ 7 inches	
Quality Size ≥ 11"	77%
Preferred Size ≥ 14"	38%
Memorable Size ≥ 17"	8%



Summary of Results

Barker Lake is a 213 acre drainage lake in eastern Sawyer County with a maximum depth of 12 feet. Barker Lake is essentially a widening of the East Fork of the Chippewa River. The water is stained and the substrate is mostly rock, with some mucky weedy bays present.

Barker Lake lies on the East Fork of the Chippewa River which has a strong influence on the fish community. White sucker and several redhorse species often associated with rivers are abundant in Barker Lake, though specific data on these species are not reported here.

Adult walleye were captured at a low rate in Barker Lake. Walleye populations in rivers are prone to fluctuations in recruitment and abundance, and the Barker Lake walleye population seems to be on the low end of this cycle currently (similar to results from Blaisdell Lake upstream in 2015). The good news is that there are a healthy number of juvenile walleye present, many of which are likely the product of extended growth walleye stocking events in recent years based on results of other surveys. Assuming these fish stay in Barker Lake (no guarantee in a system with this much connectivity to other waterbodies) they should contribute to the fishery in the coming years.

Black crappie were the most abundant species of panfish present in Barker Lake, which is typical of systems along a river. Crappie size was fair, with many fish that could be large enough to provide a meal for anglers (84% were over 8 inches), but few that would be highly preferred (just 14% were over 10 inches).

Smallmouth bass are present in Barker Lake and are more abundant than largemouth bass, which are extremely rare. Smallmouth bass attain good size in Barker Lake (we captured several smallmouth over 15 inches) and it is a well-balanced population with a mix of different sizes and year classes.

Only one muskellunge was captured (at 40.5") during the netting survey due to very cold water temperature, but several others were observed during the shocking portion of the survey. Other species observed during survey work include bluegill, burbot, common carp, golden shiner, golden redhorse, northern pike, pumpkinseed, rock bass, shorthead redhorse, silver redhorse, and white sucker.

A young walleye from Barker Lake, captured during the 2016 netting survey. Photo by Max Wolter.

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